



Issuance Date: March 20, 2006  
Effective Date: April 1, 2006  
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RECLAIMED WATER PERMIT NUMBER ST 6206

STATE OF WASHINGTON  
DEPARTMENT OF ECOLOGY  
OLYMPIA, WASHINGTON 98504-7600

In compliance with the provisions of the  
State of Washington Reclaimed Water Act, Chapter 90.46 Revised Code of Washington  
and the  
Water Pollution Control Law Chapter 90.48 Revised Code of Washington, as amended,

STATE OF WASHINGTON  
DEPARTMENT OF HEALTH

In compliance with the provisions of  
Chapter 90.46 and 43.70 Revised Code of Washington  
authorizes

**LOTT Alliance**

**111 Market Street Northeast, Suite 250  
Olympia, Washington 98501**

to produce and distribute reclaimed water in accordance with the special and general conditions which  
follow.

Plant Location:

Martin Way Reclaimed Water Plant  
6121 Martin Way East  
Lacey, WA

Discharge Location:

Reclaimed Water from the Martin Way Reclaimed  
Water Plant to reuse sites in the Lacey area,  
including groundwater recharge using surface  
percolation basins at NW1/4 of the SE1/4 of Sec. 2,  
T18N, R1W, W.M.

Treatment Type

Membrane Bioreactor (MBR), Class A Reclaimed  
Water

Latitude: 47° 04' 33" N

Longitude: 122° 45' 54" W

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Southwest Regional Manager  
Water Quality Program  
Washington State Department of Ecology

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### SUMMARY OF PERMIT REPORT SUBMITTALS

Refer to the Reclaimed Water and General Conditions of this permit for additional submittal requirements.

Permit Section	Submittal	Frequency	First Submittal Date
R3.A.	Discharge Monitoring Report (DMR)	Monthly	By the 15 <sup>th</sup> day of the month following start of reclaimed water production
R3.E.	Noncompliance Notification	As needed	
R3.F.3.	Monthly Summary of Operating Records	Monthly with DMR	By the 15 <sup>th</sup> day of the month following start of reclaimed water production
R3.F.4.	Cross Connection Control Report	Annual	Before distribution of reclaimed water and then by May 15 <sup>th</sup> of each year
R4.A.	Water Reuse Summary Plan	Annual	Before distribution of reclaimed water and then by January 31 <sup>st</sup> of each year
R4.H.	Service and Use Area Contract	As needed	Before distribution of reclaimed water
R4.K.	Surface Percolation Use	As needed	By the start of surface percolation
R5.B.	Operation and Maintenance Manual	1/permit cycle	July 1, 2006
R5.B.	Operation and Maintenance Manual Review	Annual	One year from manual approval date
G7.	Application for permit renewal	1/permit cycle	October 1, 2010

DMRs and Reclaimed Water Reports shall be submitted to the following addresses:

1. Department of Ecology, Permit Coordinator, Southwest Regional Office, P.O. Box 47775, Olympia, Washington 98504-7775
2. Department of Health, Water Reclamation and Reuse Program, Office of Environmental Health & Safety, 1500 West 4<sup>th</sup> Avenue, Suite 403, Spokane, Washington 99204.

## RECLAIMED WATER CONDITIONS

Beginning on the effective date of this permit and lasting through its expiration date, all reclaimed water produced at the Martin Way Reclaimed Water plant by the Permittee shall comply with the Reclaimed Water Conditions (R.) and General Conditions (G.) of this permit.

### R1. RECLAIMED WATER LIMITATIONS

All discharges and activities authorized by this permit shall be consistent with the terms and conditions of this permit. The discharge of any of the following pollutants more frequently than, or at a concentration in excess of, that authorized by this permit shall constitute a violation of the terms and conditions of this permit.

The production and use of reclaimed water shall be in compliance with all specific conditions and requirements of the Washington State Water Reclamation and Reuse Standards, 1997, and is subject to the requirements listed below:

Beginning on the effective date and lasting through the expiration date of this permit, the Permittee is authorized to distribute Class A reclaimed water produced at the Martin Way Reclaimed Water plant to public and private entities for commercial and industrial uses, to apply reclaimed water to land for irrigation at agronomic rates, and recharge groundwater via surface percolation. The distribution and use of reclaimed water is subject to the following treatment and water quality limitations:

Reclaimed Water Limitations: Outfall #006		
<u>Parameter</u>	<u>Average Monthly<sup>a</sup></u>	
Flow	2.0 MGD	Martin Way Reclaimed Water Plant Class A effluent
Disinfected - Reclaimed Water		
<u>Parameter</u>	<u>Average Monthly<sup>a</sup></u>	<u>Average Weekly<sup>b</sup></u>
BOD <sub>5</sub>	20 mg/L	30 mg/L
TSS	30 mg/L	45 mg/L
Dissolved Oxygen	Shall be measurably present in effluent at all times	
<u>Parameter</u>	<u>Average Monthly<sup>a</sup></u>	<u>Sample Maximum<sup>c</sup></u>
Turbidity	0.2 NTU	0.5 NTU
Total Nitrogen as N	10 mg/L	15 mg/L
<u>Parameter</u>	<u>7-day Median<sup>d</sup></u>	<u>Sample Maximum<sup>e</sup></u>
Total Coliform	2.2 MPN/ 100 ml	23 MPN/100 ml
pH	Shall be between 6 and 9 standard units at all times	

Reclaimed Water Limitations: Outfall #006		
Distribution System		
Parameter		Minimum Daily <sup>f</sup>
Chlorine Residual		0.5 mg/L
<sup>a</sup> The average monthly effluent limitation is defined as the highest allowable average of daily discharges over a calendar month, calculated as the sum of all daily discharges measured during a calendar month divided by the number of daily discharges measured during that month.		
<sup>b</sup> The average weekly effluent limitation is defined as the highest allowable average of daily discharges over a calendar week, calculated as the sum of all daily discharges measured during a calendar week divided by the number of daily discharges measured during that week.		
<sup>c</sup> The sample maximum is defined as the value not to be exceeded by any single sample.		
<sup>d</sup> The median number of total coliform organisms in the reclaimed water after disinfection does not exceed 2.2 per 100 milliliters, as determined from the bacteriological results of the last seven days for which analyses have been completed.		
<sup>e</sup> The number of total coliform organisms shall not exceed 23 per 100 milliliters in any single sample.		
<sup>f</sup> A chlorine residual of at least 0.5 mg/L shall be maintained in the reclaimed water during conveyance to the use area.		

The distribution of reclaimed water for groundwater recharge via surface percolation is also subject to the following ground water quality limitations at MW1-10:

GROUND WATER ENFORCEMENT LIMITATIONS:	
Primary Drinking Water Criteria	Sample Maximum <sup>a</sup>
Nitrate as N	10 mg/L
Nitrite as N	1 mg/L
Arsenic	10 µg/L
Cadmium	5 µg/L
Chromium	100 µg/L
Fluoride	2 mg/L
Mercury	2 µg/L
Nickel	100 µg/L
Total Trihalomethanes (TTHM)	0.10 mg/L
Other Groundwater Criteria	Sample Maximum <sup>a</sup>
Total Dissolved Solids	500 mg/L
Chloride	250 mg/L
Sulfate	250 mg/L
Copper	1300 µg/L
Lead	15 µg/L
Manganese	50 µg/L

<b>GROUND WATER ENFORCEMENT LIMITATIONS:</b>	
Iron	0.3 mg/L
Silver	100 µg/L
Zinc	5000 µg/L
<sup>a</sup> The sample maximum is the highest allowable concentration for any sample as measured in the ground water at the top of the uppermost aquifer beneath or down gradient of the infiltration site.	
In the event of an exceedance of a groundwater enforcement limit, the Permittee shall:	
<ol style="list-style-type: none"> <li>1. Provide immediate verbal notification to the Department's Southwest Regional Office, Water Quality Program.</li> <li>2. Resample the well within 48 hours of receiving the laboratory report;</li> <li>3. Provide written notification with the next monitoring report; and</li> <li>4. Prepare a report documenting conditions and describing action taken and planned to reduce the level to below the enforcement limit as measured at the point of compliance.</li> </ol>	

## **R2. RECLAIMED WATER MONITORING REQUIREMENTS**

### **A. Influent Monitoring**

The Permittee shall monitor the wastewater influent according to the following schedule:

<b>Parameter</b>	<b>Units</b>	<b>Sample Point</b>	<b>Sampling Frequency</b>	<b>Sample Type</b>
Flow	MGD	Influent	Continuous*	Recording meter
BOD <sub>5</sub>	mg/L	Influent	3 days/week	24-hour composite
TSS	mg/L	Influent	3 days/week	24-hour composite
pH	Standard Units	Influent	Daily	Grab
Total Nitrogen (as N)	mg/L	Influent	1 day/week	24-hour composite
*Continuous means uninterrupted except for brief lengths of time for calibration, for power failure, or for unanticipated equipment repair or maintenance. Sampling shall be taken daily when continuous monitoring is not possible.				

### **B. Class A Reclaimed Water Monitoring**

The Permittee shall monitor the reclaimed water according to the following schedule:

Parameter	Units	Sample Point <sup>a</sup>	Sampling Frequency	Sample Type
Flow	MGD	Disinfected reclaimed water	Continuous	Recording meter
BOD <sub>5</sub>	mg/L	Disinfected reclaimed water	3 days/week	24-hour composite
TSS	mg/L	Disinfected reclaimed water	Daily	24-hour composite
pH	Standard Units	Disinfected reclaimed water	Daily	Grab <sup>b</sup>
Dissolved Oxygen	mg/L	Disinfected reclaimed water	Daily	Grab <sup>b</sup>
Temperature	Celsius	Disinfected reclaimed water	Daily	Grab <sup>b</sup>
Turbidity	NTU	Filter effluent prior to disinfection	Continuous	Recording meter
Total Nitrogen (as N)	mg/L	Disinfected reclaimed water	1 day/week	24-hour composite
Total Coliform <sup>d</sup>	MPN per 100 ml	Disinfected reclaimed water	Daily	Grab <sup>b</sup>
Total Chlorine Residual	mg/L	Water Reuse Distribution Line	Daily (when in use)	Grab <sup>b</sup>
Table II of Appendix D of 40 CFR part 122, as amended	µg/L	Disinfected reclaimed water	Annually	Grab and 24-hour composite, as appropriate
Table III of Appendix D of 40 CFR part 122, as amended	µg/L	Disinfected reclaimed water	Quarterly	Grab and 24-hour composite, as appropriate
<sup>a</sup> Disinfected reclaimed water samples shall be taken before distribution system.				
<sup>b</sup> Grab samples shall be taken at the same time daily when wastewater characteristics are the most demanding on the treatment facilities and disinfection processes.				
<sup>c</sup> Filter effluent turbidity analysis shall be performed by a continuous recording turbidimeter and shall also be read and recorded at least every four hours.				
<sup>d</sup> As an alternate method, total coliform bacteria may be monitored using the ONPG-MUG test (also called Autoanalysis Colilert System) per latest edition of standard methods.				



C. Ground Water Monitoring

The sampling points for ground water will be monitoring wells MW-1 to MW-10

The Permittee shall monitor the ground water according to the following schedule:

Parameter	Units	Minimum Sampling Frequency	Sample Type
Static well water elevation	Feet above sea level	Quarterly <sup>(1)</sup>	Field Measurement
Temperature	°C	Quarterly <sup>(1)</sup>	Field Measurement
Dissolved Oxygen	mg/L	Quarterly <sup>(1)</sup>	Field Measurement
pH	Standard Units	Quarterly <sup>(1)</sup>	Field Measurement
Conductivity	umhos/cm	Quarterly <sup>(1)</sup>	Grab
Nitrate NO <sub>3</sub> (as N)	mg/L	Quarterly <sup>(1)</sup>	Grab
Nitrite NO <sub>2</sub> (as N)	mg/L	Quarterly <sup>(1)</sup>	Grab
TKN (as N)	mg/L	Quarterly <sup>(1)</sup>	Grab
Total Dissolved Solids	mg/L	Quarterly <sup>(1)</sup>	Grab
Total Coliform Bacteria	cfu/100 ml	Quarterly <sup>(1)</sup>	Grab
Chloride	mg/L	Quarterly <sup>(1)</sup>	Grab
Cations/Anions: Calcium, Magnesium, Potassium, Sodium, Bicarbonate, Carbonate, Fluoride, Sulfate	mg/L	Yearly <sup>(2)</sup>	Grab
Total Metals: Arsenic, Cadmium, Chromium, Copper, Iron, Lead, Manganese, Mercury, Nickel, Silver, Zinc <sup>(3)</sup>	µg/L	Yearly <sup>(2)</sup>	Grab
Total Trihalomethanes (TTHM)	mg/L	Quarterly <sup>(1)</sup>	Grab

<sup>(1)</sup>Quarterly is defined as report on the March, June, September, and December Discharge Monitoring Reports (DMRs).

<sup>(2)</sup>Yearly is defined as report on the March DMR.

<sup>(3)</sup>Analytical method: Arsenic, EPA 206.3 or 206.2; Cadmium, EPA 2007.7 or 213.2; Chromium, EPA 200.7 or 218.2; Copper, EPA 200.7 or 220.2; Lead, EPA 239.2; Mercury, EPA 245.1 or 245.2; Nickel, EPA 249.2; Silver, EPA 272.2; Zinc, EPA 200.7 or 289.1.

D. Sampling and Analytical Procedures and Plan

Samples and measurements taken to meet the requirements of this permit shall be representative of the volume and nature of the monitored parameters, including representative sampling of any unusual discharge or discharge condition, including bypasses, upsets and maintenance-related conditions affecting effluent quality.

Ground water sampling shall conform to the latest protocols in the *Implementation Guidance for the Ground Water Quality Standards*, (Ecology 1996). The Permittee shall maintain a ground water sampling and analysis plan that describes in detail the water level measurement method, purging and sampling procedures, decontamination procedures, sample bottle material and sizes, preservatives, holding times, quality

assurance samples and analytical methods. The plan should describe the sampling procedures in sufficient detail that a person unfamiliar with the site could use the document to obtain samples consistent with previous sample events.

Sampling and analytical methods used to meet the reclaimed water and wastewater monitoring requirements specified in this permit shall conform to the latest revision of the *Guidelines Establishing Test Procedures for the Analysis of Pollutants* contained in 40 Code of Federal Regulations (CFR) Part 136 or to the latest revision of *Standard Methods for the Examination of Water and Wastewater* (APHA), unless otherwise specified in this permit or approved in writing by the Department of Ecology (Department).

E. Flow Measurement

Appropriate flow measurement devices and methods consistent with accepted scientific practices shall be selected and used to ensure the accuracy and reliability of measurements of the quantity of monitored flows. The devices shall be installed, calibrated, and maintained to ensure that the accuracy of the measurements are consistent with the accepted industry standard for that type of device. Frequency of calibration shall be in conformance with manufacturer's recommendations and at a minimum frequency of at least one calibration per year. Calibration records shall be maintained for at least three years.

F. Laboratory Accreditation

All monitoring data required by the Department shall be prepared by a laboratory registered or accredited under the provisions of, *Accreditation of Environmental Laboratories*, Chapter 173-50 Washington Administrative Code (WAC). Flow, temperature, settleable solids, and internal process control parameters except those listed in Condition R2 are exempt from this requirement.

G. Reuse Instrumentation Calibration

Monitoring devices shall be installed, calibrated and maintained to ensure that the accuracy of the measurements is consistent with the accepted industry standard for that type of device. Frequency of calibration shall be in conformance with the manufacturer's recommendations. Calibration records shall be maintained for at least three years.

The Permittee shall also verify the accuracy of on-line turbidimeters at a minimum frequency of at least once every two weeks.

**R3. REPORTING AND RECORDKEEPING REQUIREMENTS**

The Permittee shall maintain records and report to the Departments of Ecology and Health in accordance with the following conditions. All records shall be retained for a minimum of three years. The falsification of information submitted to the Departments shall constitute a violation of the terms of this permit.

A. Submittal Reporting

The first monitoring period for reclaimed water begins on the effective date of the permit. Monitoring results shall be submitted monthly. Monitoring data obtained during the previous month shall be summarized and reported on a form provided, or otherwise approved, by the Departments of Health and Ecology, and be received no later than the 15th day of the month following the completed reporting period, unless otherwise specified in this permit.

Monitoring Report forms must be submitted monthly whether or not the facility is reclaiming and distributing reclaimed water. If the reclamation facility was not operating during a given monitoring period, submit the form as required with the words "no reclamation or reuse" entered in place of the reclaimed water monitoring results.

Reclaimed water monitoring reports shall be submitted to the following addresses:

1. Department of Ecology, Municipal Permit Coordinator, Southwest Regional Office, P.O. Box 47775, Olympia, Washington 98504-7775
2. Department of Health, Water Reclamation and Reuse Program, Office of Environmental Health & Safety, 1500 West 4<sup>th</sup> Avenue, Suite 403, Spokane, Washington 99204

B. Records Retention

The Permittee shall retain records of all monitoring information for a minimum of three years. Such information shall include all calibration and maintenance records and all original recordings for continuous monitoring instrumentation, copies of all reports required by this permit, and records of all data used to complete the application for this permit. This period of retention shall be extended during the course of any unresolved litigation regarding the discharge of pollutants by the Permittee or when requested by the Director.

C. Recording of Results

For each measurement or sample taken, the Permittee shall record the following information: (1) the date, exact place and time of sampling; (2) the individual who performed the sampling or measurement; (3) the dates the analyses were performed; (4) who performed the analyses; (5) the analytical techniques or methods used; and (6) the results of all analyses.

D. Additional Monitoring by the Permittee

If the Permittee monitors any pollutant more frequently than required by this permit using test procedures specified by Condition R2 of this permit, then the results of this monitoring shall be included in calculation and reporting of the data submitted in the Permittee's self-monitoring reports.

E. Noncompliance Notification

In the event the Permittee is unable to comply with any of the permit terms and conditions due to any cause, the Permittee shall:

1. Immediately take action to stop, contain, and cleanup unauthorized discharges or otherwise stop the violation, and correct the problem;
2. Repeat sampling and analysis of any violation and submit the results to the Department within 30 days after becoming aware of the violation;
3. Within 24 hours, notify the Departments of Health and Ecology of the failure to comply; and
4. Submit a detailed written report to the Department within 30 days, unless requested earlier by the Department, describing the nature of the violation, corrective action taken and/or planned, steps to be taken to prevent a recurrence, results of the resampling, and any other pertinent information.

Compliance with these requirements does not relieve the Permittee from responsibility to maintain continuous compliance with the terms and conditions of this permit or the resulting liability for failure to comply.

F. Reclaimed Water Operational Records

1. Operating records shall be maintained at the treatment plant or within a central depository within the Permittee's operating agency. These records shall include: records of all analyses performed, records of operational problems, unit process and equipment breakdowns, and diversions to emergency storage or disposal; and all corrective or preventative action taken.
2. Process or equipment failures triggering an alarm that is key to maintaining reliability of reclaimed water quality shall be recorded and maintained as a separate record file. The recorded information shall include the time and cause of failure and corrective action taken.
3. A monthly summary of operating records as specified above shall be submitted with the Discharge Monitoring Report form to the Departments of Ecology and Health at that address listed under R3.A above.
4. Cross Connection Control Report. An annual cross-connection control report shall be submitted before distribution of reclaimed water and then by May 15<sup>th</sup> of each year to the Departments of Health by a certified Cross-Control Specialist identifying all devices tested and any cross-connection incidents which occurred in the reuse system.

**R4. RECLAIMED WATER DISTRIBUTION AND USE**

The Permittee shall monitor the reclamation facility loading and the following conditions.

A. Water Reuse Summary Plan

The Permittee shall prepare a water reuse summary plan, which contains a summary description of the proposed water reuse system from the approved Engineering Report. The plan shall be submitted for approval to the Departments of Health and Ecology before distribution of reclaimed water and updated annually. The annual updates shall be due January 31<sup>st</sup> of each year, and cover the previous calendar year. A copy of the revised plan shall be submitted to the Departments of Ecology and Health. The plan shall contain, but not be limited to, the following:

1. Description of the reuse distribution system.
2. Identification and current list of all water purveyors, uses, users, and location of reuse sites.
3. Evaluation of reuse sites, estimated volume of reclaimed water use at reuse sites, means of application, and for irrigation or surface percolation uses, the application rates, water balance, expected agronomic uptake, potential to impact ground water or surface water at the site, background water quality and hydrogeological information necessary to evaluate potential water quality impacts.
4. Description of any additional treatment provided to the reclaimed water and any additional distribution system.

This Water Reuse Summary Plan may be combined with the plan required by the Budd Inlet Treatment Plant permit.

B. Authorized Uses and Locations

Beginning with the production of reclaimed water at the Martin Way plant and lasting through the expiration date of this permit, the Permittee is authorized to distribute reclaimed water from the Martin Way plant in accordance with the terms and conditions of this permit for authorized uses.

The distribution by the Permittee of reclaimed water from the Martin Way plant that does not meet the treatment, water quality and monitoring requirements established in this permit shall constitute a violation of the terms and conditions of this permit. The use of reclaimed water other than for authorized uses and locations that are listed or will be listed in the next update of a Departments of Health and Ecology approved Water Reuse Summary Plan shall constitute a violation of the terms and conditions of this permit.

The Permittee may produce and distribute Class A reclaimed water for the uses listed in the approved engineering report at the locations listed in the approved Water Reuse Summary Plan, and for new locations as described in R4.C.

C. Authorization for New Direct Non-potable Uses of Reclaimed Water

The Permittee may provide reclaimed water from the Martin Way plant for direct beneficial uses at locations not listed in the Water Reuse Summary Plan required by this

permit in accordance with the terms and conditions of this permit provided the following conditions are met:

1. Direct beneficial uses and requirements for use are as listed in the Washington State Water Reclamation and Reuse Standards. The class of reclaimed water provided meets or exceeds the minimum requirements for the proposed use. Irrigation uses do not exceed agronomic rates of application.
2. The use area is located within Thurston County or other nearby counties. The water reclamation facility and use areas shall comply with local permitting and land use requirements.
3. The reclaimed water meets all applicable requirements of this permit for the approved class of reclaimed water including source control, treatment, water quality limitations, monitoring, recordkeeping, operation and maintenance, distribution and use.
4. The Permittee lists the new uses in the next annual Water Reuse Summary Plan and a copy of the revised plan is submitted to the Departments of Ecology and Health. The plan is described in R4.A.

D. Revocation of Authorization

The Department may revoke authorization to provide service if the Permittee fails to comply with any requirement in this permit. Determination to revoke authorization shall be based on the risk to public health and safety or threat to waters of the state. The Department may revoke the authorization for any or all facilities located within a specific geographic area if, due to a geologic or hydrologic condition, the cumulative effect of the facilities causes the violation of state water quality standards. Before revoking the authorization, the Department shall notify the Permittee in writing and provide a reasonable opportunity and time frame to correct the noncompliance.

E. Bypass Prohibited

There shall be no bypassing of untreated or partially treated wastewater from the reclamation plant or any intermediate unit processes to the distribution system or point of use at any time. Diverting flows from the Martin Way plant to the Budd Inlet plant does not constitute a bypass provided such diversion does not cause an exceedance of the effluent limitations of National Pollutant Discharge Elimination System (NPDES) Permit No. WA0037061. All reclaimed water being distributed for beneficial use must meet Class A requirements at all times. Water not meeting Class A must be retained for additional treatment by diversion to a bypass storage lagoon or sent to another permitted treatment plant.

The Departments of Ecology and Health shall be notified by telephone within 24 hours of any diversion to a bypass storage lagoon. Substandard wastewater shall not be discharged to the reclaimed water distribution system or use areas without specific approval from the Departments of Health and Ecology.

F. Reliability

The Permittee shall maintain the highest reliability class as described in the Water Reclamation and Reuse Standards which require one of the following features for each of the critical reclamation treatment unit processes of oxidation, filtration, and disinfection:

1. Alarms and standby power source.
2. Alarms and automatically actuated short-term (24-hour) storage or disposal provisions.
3. Automatically actuated long-term storage or disposal provisions for treated wastewater.

G. Use Area Responsibilities

1. A standard notification sign shall be developed by the Permittee using colors and verbiage approved by the state Department of Health. The signs shall be used in all reclaimed water use areas, consistent with the Water Reclamation and Reuse Standards.
2. Reclaimed water use, including runoff and spray shall be confined to the designated and approved use area.
3. The Permittee shall control industrial and toxic discharges to the sanitary sewer that may affect reclaimed water quality through either a delegated pretreatment program with the Department or assuring all applicable discharges have permits issued under the Water Pollution Control Act, Chapter 90.48 Revised Code of Washington (RCW), and the State Waste Discharge Permit Regulation, Chapter 173-216 WAC.
4. Where the reclaimed water production, distribution and use areas are under direct control of the Permittee, the Permittee shall maintain control and be responsible for all facilities and activities inherent to the production, distribution and use of the reclaimed water. The Permittee shall ensure that the reuse system operates as approved by the Departments of Health and Ecology.

H. Service and Use Area Contract

Where the reclaimed water additional treatment, distribution system or use area is not under direct control of the Permittee:

1. No reclaimed water shall be distributed by the Permittee or water purveyor without a binding Service and Use Area Contract in place. The contract shall ensure that construction, operation, maintenance, use area responsibilities, and monitoring meet all requirements of the Departments of Health and Ecology. This Service and Use Area contract must be consistent with the requirements of the Water Reclamation and Reuse Standards, 1997.
2. If a standard contract has been approved by the Departments, the Permittee or the water purveyor may certify that the individual contract copies submitted comply

with the terms and conditions of the approved standard contract. If no standard contract has been approved, a copy of each Service and Use Area contract must be submitted to and approved by the Departments of Health and Ecology prior to implementation.

3. The Permittee or the water purveyor shall maintain all contracts for reclaimed water use for the duration of the permit. The Permittee shall inform the Departments of Health and Ecology in writing of any proposed changes to existing agreements.
4. Unless expressly stated otherwise in an approved contract, the Permittee is responsible for all reuse facilities and activities inherent to the production, distribution and use of the reclaimed water.
5. Each individual Service and Use Area contract shall provide the Permittee and the water purveyor with the authority to regulate distribution, enter and inspect the site and to terminate service of reclaimed water to any customer violating the states Water Reclamation and Reuse Standards. In lieu of specific language in each contract, the Permittee in conjunction with the contributing jurisdictions may complete local ordinances to include policies and procedures regulating the distribution and delivery of reclaimed water.

I. Reclaimed Water Ordinance

The Permittee shall complete interlocal agreements with the four contributing jurisdictions, and the contributing jurisdictions shall complete local ordinances to include policies and procedures for the distribution and delivery of reclaimed water. The interlocal agreements and ordinances shall provide the Permittee and jurisdictions with the authority to terminate service of reclaimed water from any jurisdiction or customer violating the state Water Reclamation and Reuse Standards and restrictions outlined in the service and use agreement.

J. Irrigation Use

1. For any irrigation use of reclaimed water, the hydraulic loading rate of reclaimed water shall be determined.
2. Irrigation uses shall conform to all requirements of the Washington State Water Reclamation and Reuse Standards. The Permittee in coordination with contributing jurisdictions shall assure that all customers or authorized personnel using reclaimed water have completed training in the requirements for appropriate use of the water. Users of reclaimed water must ensure that their irrigation systems are in good working order, maintained regularly, and kept free of leaks. They must further ensure that their irrigation controllers are set so that reclaimed water is applied appropriately to the landscape, to avoid excessive puddling or runoff of water. Sprinkler heads should be adjusted regularly to avoid application of water to impervious surfaces.

The Permittee or the water purveyor shall maintain all irrigation agreements for lands not owned for the duration of the permit. The Permittee shall inform the



Departments of Health and Ecology in writing in the annual update to the Water Reuse Summary Plan of any proposed changes to existing agreements.

K. Surface Percolation Use

1. For any surface percolation of reclaimed water in the infiltration basin, the hydraulic loading rate shall be determined based on a detailed water balance. The calculated loading rate(s) and the parameters and methods used to determine the loading rates shall be submitted to the Department for approval and is due by the start of surface percolation.
2. Background/natural groundwater quality must be documented and sampling locations identified and approved by the Department.
3. Surface waters shall not be impaired due to the infiltration of reclaimed water.

L. Wetlands Use

The Permittee or the water purveyor may use reclaimed water for enhancement of natural wetlands, as long as the following conditions are met and the Department has granted written approval for the specific wetland to be enhanced:

1. Augmentation of wetland hydrologic regime is not to exceed an additional (above background) average annual hydraulic loading rate of 2 cm/day to Category II wetlands and 3 cm/day to Category III and IV wetlands, unless monitoring can demonstrate that a net ecological benefit can be maintained at a higher rate.
2. Average monthly water level elevations shall not increase by more than 10 cm above the pre-augmentation water level.
3. In Accordance with the Water Reclamation and Reuse Standards, the Permittee shall monitor the vegetation cover, plant diversity, macroinvertebrate biomass, amphibian species, fish biomass and species, bird density and species, threatened/endangered density and species once per year during the 1<sup>st</sup>, 2<sup>nd</sup>, 4<sup>th</sup>, 6<sup>th</sup>, 8<sup>th</sup>, and 10<sup>th</sup> growing season. There shall be no more the 25 percent reduction in parameter measurements over the wetland or 50 percent reduction at any one location in the wetland. The Permittee shall submit a report to the Department on the results of the biological monitoring within three months of completion of the monitoring.

M. Other Uses of Reclaimed Water

Effluent used for sewage treatment plant purposes within the bounds of the wastewater treatment facility is not required to meet these standards unless potential public exposure, as determined by the Departments of Health and Ecology requires the use of reclaimed water.

The following uses require modification and public notice of this permit.

1. Groundwater recharge via direct injection.

2. Discharge of reclaimed water to surface waters, unless the discharge is covered by NPDES permit WA0037061.
3. Any reclamation facilities or uses that are not specifically authorized by this permit.
4. Any facilities or uses if determined necessary by the Department of Ecology or Health for public health or environmental protection.

## **R5. OPERATION AND MAINTENANCE**

The Permittee shall at all times be responsible for the proper operation and maintenance of any facilities or systems of control installed to achieve compliance with the terms and conditions of this permit.

### **A. Reclaimed Water System Maintenance**

The Permittee and the water purveyors shall institute an adequate operation and maintenance (O&M) program for the entire reclamation system. Maintenance records shall be maintained on all major electrical and mechanical components of the reclaimed water system, distribution system, and use areas. Such records shall clearly specify the frequency and type of maintenance recommended by the manufacturer and shall show the frequency and type of maintenance performed. These maintenance records shall be available for inspection at all times.

1. At all times, the reclamation system, distribution and use areas shall be maintained to ensure that all equipment is kept in a reliable operating condition.
2. A chlorine residual of at least 0.5 mg/L shall be maintained in the reclaimed water during conveyance from the reclamation system to the use area unless waived by the Departments of Health and Ecology.
3. Maintenance of a chlorine residual is not required in reclaimed water impoundments and storage ponds. At the discretion of the Departments of Health and Ecology, chlorine residual may not be required in reclaimed water distributed from storage ponds.

### **B. Operation and Maintenance (O&M) Manual**

An O&M Manual shall be prepared by the Permittee in accordance with WAC 173-240-080 and be submitted to the Departments of Health and Ecology for approval by **July 1, 2006**. The O&M Manual shall be reviewed by the Permittee at least annually. The Permittee shall within one year of the approval date of the manual confirm the review by letter and/or a manual update to the Department. All manual changes or updates shall be submitted to the Departments whenever they are incorporated into the manual. The approved operation and maintenance manual shall be kept available at the Martin Way plant.

The operation and maintenance manual shall contain the Martin Way plant process control monitoring schedule. All operators shall follow the instructions and procedures of this manual.

The manual shall include:

1. Emergency procedures for plant shutdown and cleanup in event of wastewater system upset or failure;
2. Irrigation system operational controls and procedures for systems that are under direct control of the Permittee;
3. Protocols and procedures for ground water monitoring network sampling and testing;
4. Plant maintenance procedures;
5. Alarm condition response plan to ensure that no untreated or inadequately-treated wastewater will be delivered to reclaimed water use areas.
6. Discussion of the cross-connection control and inspection program, including who will be responsible for compliance and testing of the cross-connection control devices.
7. Operational strategies for the reclaimed water use areas that are under direct control of the Permittee.

This O&M Manual may be electronic and may be combined with the O&M Manual required for the Budd Inlet plant by NPDES Permit No. WA0037061.

C. Electrical Power Failure

The Permittee is responsible for maintaining adequate safeguards to prevent the discharge of untreated wastes or wastes not treated in accordance with the requirements of this permit during electrical power failure at the water reclamation plant and/or sewage lift stations either by means of alternate power sources, standby generator, or retention of inadequately treated wastes. The power supply shall be provided with one of the following reliability features to assure that inadequately treated wastewater is not discharged to distribution or use areas:

1. An alarm and a standby power source
2. An alarm and automatically actuated short-term storage or alternative disposal provisions. All equipment other than pump-back equipment shall be either independent of the normal power supply or provided with a standby power supply.
3. Automatically actuated long-term storage or disposal provisions. All equipment other than pump-back equipment shall be either independent of the normal power supply or provided with a standby power supply.

**R6. RESIDUAL SOLIDS**

Residual solids include screenings, grit, scum, waste activated sludge and other solid waste. The Permittee shall store and handle all residual solids in such a manner so as to prevent their entry into state ground or surface waters. The waste activated sludge can be sent to the Budd Inlet Treatment Plant for further processing. The Permittee shall not discharge leachate from residual solids to state surface or ground waters.

## GENERAL CONDITIONS

### G1. SIGNATORY REQUIREMENTS

All applications, reports, or information submitted to the Department shall be signed and certified.

- A. All permit applications shall be signed by either a principal executive officer or a ranking elected official.
- B. All reports required by this permit and other information requested by the Department shall be signed by a person described above or by a duly authorized representative of that person. A person is a duly authorized representative only if:
  - 1. The authorization is made in writing by a person described above and submitted to the Department.
  - 2. The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility, such as the position of plant manager, superintendent, position of equivalent responsibility, or an individual or position having overall responsibility for environmental matters. (A duly authorized representative may thus be either a named individual or any individual occupying a named position.)
- C. Changes to authorization. If an authorization under paragraph B.2 above is no longer accurate because a different individual or position has responsibility for the overall operation of the facility, a new authorization satisfying the requirements of paragraph B.2 above must be submitted to the Department prior to or together with any reports, information, or applications to be signed by an authorized representative.
- D. Certification. Any person signing a document under this section shall make the following certification:

I certify under penalty of law, that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

**G2. RIGHT OF INSPECTION AND ENTRY**

The Permittee shall allow authorized representatives of the Departments of Ecology or Health, upon the presentation of credentials and such other documents as may be required by law:

- A. To enter upon the premises where a discharge is located or where any records must be kept under the terms and conditions of this permit.
- B. To have access to and copy - at reasonable times and at reasonable cost - any records required to be kept under the terms and conditions of this permit.
- C. To inspect - at reasonable times - any facilities, equipment (including monitoring and control equipment), practices, methods, or operations regulated or required under this permit.
- D. To sample or monitor - at reasonable times - any substances or parameters at any location for purposes of assuring permit compliance or as otherwise authorized by the Clean Water Act.

**G3. PERMIT ACTIONS**

This permit may be modified, revoked and reissued, or terminated either at the request of any interested person (including the permittee) or upon the Department's initiative. However, the permit may only be modified, revoked and reissued, or terminated for the reasons specified in 40 CFR 122.62, 122.64 or WAC 173-220-150 according to the procedures of 40 CFR 124.5.

- A. The following are causes for terminating this permit during its term, or for denying a permit renewal application:
  - 1. Violation of any permit term or condition.
  - 2. Obtaining a permit by misrepresentation or failure to disclose all relevant facts.
  - 3. A material change in quantity or type of waste disposal.
  - 4. A determination that the permitted activity endangers human health or the environment, or contributes to water quality standards violations and can only be regulated to acceptable levels by permit modification or termination [40 CFR Part 122.64(3)].
  - 5. A change in any condition that requires either a temporary or permanent reduction, or elimination of any discharge or sludge use or disposal practice controlled by the permit [40 CFR Part 122.64(4)].
  - 6. Nonpayment of fees assessed pursuant to RCW 90.48.465.
  - 7. Failure or refusal of the permittee to allow entry as required in RCW 90.48.090.

B. The following are causes for modification but not revocation and reissuance except when the permittee requests or agrees:

1. A material change in the condition of the waters of the state.
2. New information not available at the time of permit issuance that would have justified the application of different permit conditions.
3. Material and substantial alterations or additions to the permitted facility or activities which occurred after this permit issuance.
4. Promulgation of new or amended standards or regulations having a direct bearing upon permit conditions, or requiring permit revision.
5. The Permittee has requested a modification based on other rationale meeting the criteria of 40 CFR Part 122.62.
6. The Department has determined that good cause exists for modification of a compliance schedule, and the modification will not violate statutory deadlines.
7. Incorporation of an approved local pretreatment program into a municipality's permit.

C. The following are causes for modification or alternatively revocation and reissuance:

1. Cause exists for termination for reasons listed in A1 through A7 of this section, and the Department determines that modification or revocation and reissuance is appropriate.
2. The Department has received notification of a proposed transfer of the permit. A permit may also be modified to reflect a transfer after the effective date of an automatic transfer (General Condition G8) but will not be revoked and reissued after the effective date of the transfer except upon the request of the new permittee.

#### **G4. REPORTING A CAUSE FOR MODIFICATION**

The Permittee shall submit a new application, or a supplement to the previous application, along with required engineering plans and reports whenever a material change to the facility or in the quantity or type of discharge is anticipated which is not specifically authorized by this permit. This application shall be submitted at least sixty days prior to any proposed changes. The filing of a request by the Permittee for a permit modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance does not relieve the Permittee of the duty to comply with the existing permit until it is modified or reissued.

**G5. PLAN REVIEW REQUIRED**

Prior to constructing or modifying any wastewater control facilities, an engineering report and detailed plans and specifications shall be submitted to the Department for approval in accordance with Chapter 173-240 WAC. Engineering reports, plans, and specifications shall be submitted at least 180 days prior to the planned start of construction unless a shorter time is approved by the Department. Facilities shall be constructed and operated in accordance with the approved plans.

**G6. COMPLIANCE WITH OTHER LAWS AND STATUTES**

Nothing in this permit shall be construed as excusing the Permittee from compliance with any applicable federal, state, or local statutes, ordinances, or regulations.

**G7. DUTY TO REAPPLY**

The Permittee shall apply for permit renewal by **October 1, 2010**.

**G8. TRANSFER OF THIS PERMIT**

In the event of any change in control or ownership of facilities from which the authorized discharge emanate, the Permittee shall notify the succeeding owner or controller of the existence of this permit by letter, a copy of which shall be forwarded to the Department.

**A. Transfers by Modification**

Except as provided in paragraph (B) below, this permit may be transferred by the Permittee to a new owner or operator only if this permit has been modified or revoked and reissued under 40 CFR 122.62(b)(2), or a minor modification made under 40 CFR 122.63(d), to identify the new Permittee and incorporate such other requirements as may be necessary under the Clean Water Act.

**B. Automatic Transfers**

This permit may be automatically transferred to a new Permittee if:

1. The Permittee notifies the Department at least 30 days in advance of the proposed transfer date.
2. The notice includes a written agreement between the existing and new Permittees containing a specific date transfer of permit responsibility, coverage, and liability between them.
3. The Department does not notify the existing Permittee and the proposed new Permittee of its intent to modify or revoke and reissue this permit. A modification under this subparagraph may also be minor modification under 40 CFR 122.63. If this notice is not received, the transfer is effective on the date specified in the written agreement.



**G9. REDUCED PRODUCTION FOR COMPLIANCE**

The Permittee, in order to maintain compliance with its permit, shall control production and/or all discharges upon reduction, loss, failure, or bypass of the treatment facility until the facility is restored or an alternative method of treatment is provided. This requirement applies in the situation where, among other things, the primary source of power of the treatment facility is reduced, lost, or fails.

**G10. REMOVED SUBSTANCES**

Collected screenings, grit, solids, sludges, filter backwash, or other pollutants removed in the course of treatment or control of wastewaters shall not be resuspended or reintroduced to the final effluent stream for discharge to state waters.

**G11. DUTY TO PROVIDE INFORMATION**

The Permittee shall submit to the Department, within a reasonable time, all information which the Department may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit or to determine compliance with this permit. The Permittee shall also submit to the Department upon request, copies of records required to be kept by this permit [40 CFR 122.41(h)].

**G12. OTHER REQUIREMENTS OF 40 CFR**

All other requirements of 40 CFR 122.41 and 122.42 are incorporated in this permit by reference.

**G13. ADDITIONAL MONITORING**

The Department may establish specific monitoring requirements in addition to those contained in this permit by administrative order or permit modification.

**G14. PAYMENT OF FEES**

The Permittee shall submit payment of fees associated with this permit as assessed by the Department.

**G15. PENALTIES FOR VIOLATING PERMIT CONDITIONS**

Any person who is found guilty of willfully violating the terms and conditions of this permit shall be deemed guilty of a crime, and upon conviction thereof shall be punished by a fine of up to \$10,000 and costs of prosecution, or by imprisonment in the discretion of the court. Each day upon which a willful violation occurs may be deemed a separate and additional violation.

Any person who violates the terms and conditions of a waste discharge permit shall incur, in addition to any other penalty as provided by law, a civil penalty in the amount of up to \$10,000 for every such violation. Each and every such violation shall be a separate and distinct offense, and in case of a continuing violation, every day's continuance shall be deemed to be a separate and distinct violation.

**G16. DUTY TO COMPLY**

The Permittee shall comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the Clean Water Act and is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or denial of a permit renewal application.

**G17. TOXIC POLLUTANTS**

The Permittee shall comply with effluent standards or prohibitions established under Section 307(a) of the Clean Water Act for toxic pollutants within the time provided in the regulations that establish those standards or prohibitions, even if this permit has not yet been modified to incorporate the requirement.

**G18. PENALTIES FOR TAMPERING**

The Clean Water Act provides that any person who falsifies, tampers with, or knowingly renders inaccurate any monitoring device or method required to be maintained under this permit shall, upon conviction, be punished by a fine of not more than \$10,000 per violation, or by imprisonment for not more than two years per violation, or by both. If a conviction of a person is for a violation committed after a first conviction of such person under this Condition, punishment shall be a fine of not more than \$20,000 per day of violation, or by imprisonment of not more than four years, or by both.

**G19. REPORTING PLANNED CHANGES**

The Permittee shall, as soon as possible, give notice to the Department of planned physical alterations or additions to the permitted facility, production increases, or process modification which will result in: 1) the permitted facility being determined to be a new source pursuant to 40 CFR 122.29(b); 2) a significant change in the nature or an increase in quantity of pollutants discharged; or 3) a significant change in the Permittee's sludge use or disposal practices. Following such notice, this permit may be modified, or revoked and reissued pursuant to 40 CFR 122.62(a) to specify and limit any pollutants not previously limited. Until such modification is effective, any new or increased discharge in excess of permit limits or not specifically authorized by this permit constitutes a violation of the terms and conditions of this permit.

**G20. REPORTING ANTICIPATED NON-COMPLIANCE**

The Permittee shall give advance notice to the Department by submission of a new application or supplement thereto at least 180 days prior to commencement of such discharges, of any facility expansions, production increases, or other planned changes, such as process modifications, in the permitted facility or activity which may result in noncompliance with permit limits or conditions. Any maintenance of facilities, which might necessitate unavoidable interruption of operation and degradation of effluent quality, shall be scheduled during noncritical water quality periods and carried out in a manner approved by the Department.

**G21. REPORTING OTHER INFORMATION**

Where the Permittee becomes aware that it failed to submit any relevant facts in a permit application, or submitted incorrect information in a permit application, or in any report to the Department, it shall promptly submit such facts or information.

**G22. COMPLIANCE SCHEDULES**

Reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any compliance schedule of this permit shall be submitted no later than 14 days following each schedule date.